

Sub. D2 and A2 cancelled.

--8. The spindle motor for driving a magnetic disk according to claim 4, wherein the spindle motor is for a hard disk drive.--

REMARKS

Claims 4-8 are pending. Claims 1-3 have been canceled and claims 4-8 added. In addition, the specification has been amended to correct a minor informality found therein.

In paragraphs 2 and 3, on page 2 of the Office Action, claim 1 was objected to and claims 2 and 3 were rejected under 35 U.S.C. §112, second paragraph. Specific language in each claim was identified as forming the basis of either the objection or the rejection. The objection and rejection have been rendered moot by the cancellation of claims 1-3. Further, it is submitted that added claims 4-8 do not suffer the problems identified.

In paragraph 5, on page 3 of the Office Action, claims 1 and 2 were rejected under 35 U.S.C. §103(a) as being unpatentable over Suzuki et al., U.S. Patent No. 5,336,955 in view of Moritan et al., U.S. Patent No. 5,715,116, and in paragraph 6, claims 1 and 3 were rejected under 35 U.S.C. §103(a) as being unpatentable over Suzuki et al. '955 in view of Suzuki et al., U.S. Patent No. 5,793,135. The rejections have been rendered moot by the cancellations of claims 1-3. In so far as they might apply to claims 4-8, they are respectfully traversed.

Suzuki et al. '955 address an outer rotor having ball bearings between the spindle 4 which is stationary and the central hub base 7 to which the rotor yoke 6 is attached. A 3.5 inch floppy disk (column 1, line 34) 11 is then mounted onto the spindle 4, and a drive pin 12 is aligned with a hole in the disk 11 so as to drive the disk 11 for rotation after loading onto the hub base 7 (column 5, lines 9-26). Thus, Suzuki et al. '955 not only do not disclose the dynamic pressure fluid bearing or hydrodynamic bearing as admitted in the Office Action, Suzuki et al. '955 do not disclose a stepped hub having outer and inner shoulders and the relationship of the magnetic disk to the inner shoulder as well as the relationships between

the magnet, the outer shoulder, the inner shoulder, and the downwardly defending flange as claimed.

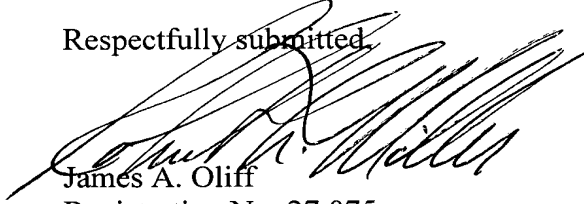
Moritan et al. disclose a fluid bearing and a methodology for allowing air to escape from the thrust bearing portion of the dynamic pressure fluid bearing. Further, Moritan et al. disclose clamping a memory disk 105 to a hub 11 via a clamp ring 104 and bolts 103. The clamping occurs substantially above the driving magnets 14. Thus, even combining Moritan et al. with Suzuki et al. '955 one would not obtain the invention as claimed as neither reference discusses the step shaped hub, nor the relationships of diameters as found in the claimed invention.

Suzuki et al. '135 disclose a flat type brushless motor for a floppy disk drive, but again, do not disclose a step shaped hub as found in the claimed invention. It is unclear precisely what type of disk member Suzuki et al. '135 mounts. The drive appears to receive a floppy disk over an outer rotatable spindle or rotor shaft 28, and is seated on a hub 27. There is no discussion of the floppy disk or how it is actually driven by the floppy disk drive. The rotor shaft 28 is mounted to a support shaft 25 which is fixedly mounted to a baseplate 20 via a housing 22. While Suzuki et al. '135 may disclose a type of dynamic bearing and that grease is applied between the inner side of the rotor shaft 28 and the support shaft 25 (column 3, lines 32-35), they again do not disclose the step-shaped hub of the claimed invention, nor the relationship of the various diameters as claimed. Thus, none of the applied references either alone or as combined in the Office Action, suggest the invention as claimed or address the combination of problems addressed by Applicant's claimed invention.

In view of the foregoing, reconsideration of the Application is requested. It is submitted that the claims as presented herein patentably distinguish over the applied references and fully meet the requirements of 35 U.S.C. §112, accordingly, allowance of claims 4-8 is respectfully solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,



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